/470 cont./

5. The Small Harpoon

•235 941 For nourishment the Tasians are almost as dependent on pinnipeds as they are on mammals. Fortunately these animals lie about on the rocks and islands in large herds and cross the individual channels in all directions (p. 38 /unnumbered/). The hunter goes after them with his small seal harpoon (Fig. 33). I use the term to distinguish the weapon I wish to describe here from other similar specimens (17b).

17b. Lothrop (b) 102 describes this weapon as consisting of "a heavy shaft and a detachable head joined to the shaft by a thong" /cited in English/.

941 313 [illegible] The small harpoon is a powerful missile, and for this reason the shaft must be long, heavy, and absolutely straight. For it, almost without exception, the wood of the evergreen beech (Nothofagus betuloides) is chosen, since its trunk usually has a very regular shape and the younger trees have sound wood for a long time. It takes a good eye to find a suitable trunk. It must be flawless if the weapon is to function dependably. It is troublesome to fell the tree. A ring of bark a hand's breadth wide is cut out just above the ground. Then, with a shell knife or a sharpened mussel shell, the layers of wood fibers are scraped off, one after the other, until the incision is deep enough. The running knot of a long sinew, wakiegua, is thrown into the high branches and pulled tight. Then a man swings from it and, aided by his own body weight, tugs until the incised portion breaks through. He immediately cuts off the upper part with the crown in the manner described above, /471/ and he now has a trunk about four meters long lying on the ground. /Fig. 33 appears here./ To cut the suitable piece out of this is a no less protracted and arduous task. The man is aiming for the middle third between the pith and the bark zone. He splits off almost half of it with the bone wedge, takalegaua (Fig. 34) and with a suitable stone as hammer. He has to split the remaining piece lengthwise a second and third time. Finally, by carefully peeling off in splinters the

/+13 cont./

This large bone point requires a two-fold fastening, if we may express it thus. Its tang is pressed into the open notch of the wooden shaft. Since it is wedge-shaped and the notch is narrow, it is jammed in tightly. In spite of that, a narrow strip of leather, [illegible], is wrapped around it about nine times. This strip has previously been well soaked and is tightly lashed, whereupon the free end is knotted. When it dries, this lashing is even more constricted and becomes all the more secure. There is by no means a special attempt to secure the spearhead in the notch; in fact, they expect it to slide out at the proper moment. Hence a second fastening is intended to keep the spearhead joined to the shaft and freely movable. Over the tang of the bone spearhead, that is, around the lower part of the notch, they place a leather strap of sealskin about 12 millimeters wide and knot it. The other end is knotted securely on the wooden shaft itself, not more than 70 centimeters from the notch. The strap is not taut, and they purposely let it hang loosely. Before the spearhead is pressed into the notch, the strap is twisted around its longitudinal axis until it is rolled up lengthwise and has a strong tendency to unwind. It is kept from doing so as soon as it is secured at the top. Sometimes this short piece of strap hangs flat and loose.

Only now is the weapon ready for the hunter to use. It is surprisingly functional. Since it is hurled, the heavy wooden shaft gives it ample force. When the bone point has penetrated the body of a seal or related animal, the latter immediately tries to shake off the burdensome foreign body. In one way or another the spearhead will detach itself from the shaft. Immediately the latter will twist somewhat sidewise and will keep on turning in the water until the rolled-up strap has uncoiled itself. The strap was purposely fastened, not in the middle part of the shaft, but on the upper third. After the shaft has detached itself from the spearhead, it does not stand exactly at right angles, but at a more or less acute angle from the direction in which the animal swims forward. This averts the danger of its snapping and yet acts as a considerable brake. Sometimes floating algae get tangled up in the shaft and the thong, which notably increases the resistance in the water. The wounded animal is seriously hindered in quick flight or deep diving, and the successful hunter can

[For the harpoon -- Analyst]

/473 cont./

411 easily overtake it. If it flees into a floating /474/ cluster of
225 algae, the dragging shaft will inevitably get tangled up, and the exhausted animal will certainly fall into the hands of its pursuer.

Extraordinary ingenuity has invented this weapon and perfected it. It works with surprising certainty.

### 4. The Large Harpoon

What we have just discovered about the working principle of the small harpoon also controls the missile that I call the large harpoon (Fig. 35): the wounded animal must not escape the hunter who has just delivered a piercing blow. The two weapons differ only in a minor factor, which, however, furnishes brilliant testimony of the keen power of invention of the Indians. Earlier observers speak about the harpoons, but the way in which they safely and easily deliver the booty into the hands of the Indian is nowhere described. It is this which reveals the great efficiency of these weapons.

In most of its details the large harpoon is like the small one, and the latter can be transformed into the former with a few manipulations. Above all, the shaft, for which the hard wood of the evergreen beech is chosen, must be altogether even and about three meters long. If it were bent only the slightest bit or otherwise defective, there would not be sufficient certainty of hitting the target. In general our natives do not handle their implements very cautiously or carefully, but every man treats his missile weapons with care and a certain amount of attention. He places them as upright as possible beside his hut, and in the canoe he lays them safely in the bow section so that they do not warp. The wood for the shaft is taken out of the concentric layers [824] of a younger Nothofagus betuloides in the manner shown in Figure 34.

411 Earlier accounts of this are inaccurate and incomplete.
824 Anyone who knows the various species of Fuegian wood will never agree with Hyades (h):24 and (q):352 that the trunk of Drimys winteri (p. 28 /untranslated/) is also suitable for the harpoon shaft. The situation is different with the young trunks of the Fuegian cypress (Libocedrus tetragona), lipaix, which always

/474 cont./

411 grow perfectly straight and have the great advantage of being
824 heavy. They do not flourish on Beagle Channel, however, except in one or two places in the west (179), and for most of the Yamana they are

179. On my fourth expedition I had definite proof of specimens of Libocedrus tetragona in Puerto Edwards on the southern shore of Brecknock Peninsula. This is the southern boundary for this species. Skottsberg (g):28 suspects that it extends somewhat farther south, namely, to Isla Chair in Darwin Sound.

[137]

simply inaccessible. Hence one sees all of them carrying merely a shaft made from the evergreen beech, šeʳ²ći, which is uniformly octagonal. Furthermore, one can /475/ observe as the average cross-section a rectangle of about 35 millimeters in width and 28 millimeters in height with the four /Fig. 35 appears here/ corners removed, producing the octagonal form. Shafts with six uniform sides are not as common as those mentioned above.

411 225 The narrow slit at the upper end of this large harpoon is, of course, also meant for a bone point which is jammed into it; a narrow leather strip is

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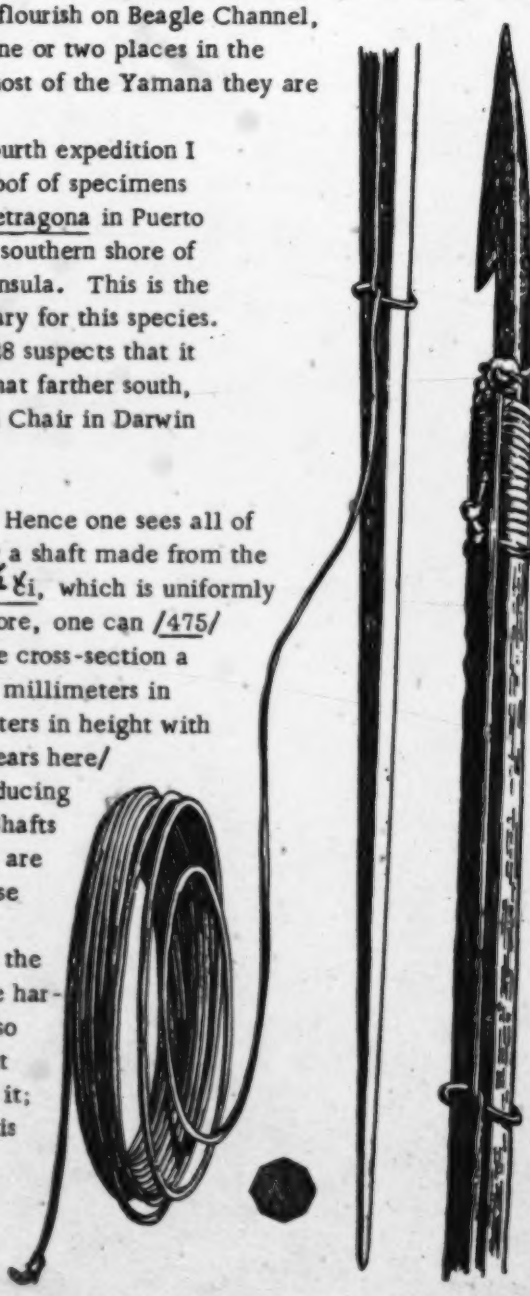

Fig. 35. The Large Harpoon.

/475 cont./

411 wound around it tightly in about ten close lashings. If one of
225 the pinnipeds is to be harpooned, even if it is the mighty male
of the sea elephant, hāsaxuwa (Macrorhinus leoninus) (Fig. 9
/Ed., see foreign text, untranslated portion/), the hunter chooses
a bone point of medium length with a single large tooth or the
still shorter one with two large barbs (Fig. 36) (180). The latter

180. Hyades (q):356 mistakenly maintains: "It is very rare to see harpoon points in bone, movable, with a notch on either side in the form of a spearhead" /translated from French/. This form is no less frequently made and used than the medium-sized and very large bone point with a single tooth.

measures about 15 centimeters. Under their thick leather skin the above-mentioned animals carry a thinner layer of fat than whales do under their epidermis, but the bone point is supposed to penetrate as deep as possible into the muscular layer where the two lateral teeth function more precisely as barbed hooks. This is also the reason why a bone spearhead more than 40 centimeters long with a sharp tooth is preferred for harpooning whales. A shorter bone point would, for the most part, stick fast in the layer of fat and therefore be almost ineffectual.

225 The thing that conspicuously distinguishes this weapon from
411 the so-called small seal-harpoon is a long leather rope of 20 or
284 more meters. It is evenly cut from the freshly skinned hide of a pinniped and is always left rolled up. One end is securely fastened to the notch /476/ of the spearhead. From here it is drawn down along the shaft and held there with two or three loose cross-loops. In aiming and throwing, the man holds the shaft approximately in the center, and the wreath of coiled rope hangs on his left forearm (181). /Fig. 36 appears here./ When he has hit the animal,

181. Snow (a):II, 361 says: "To the bone is attached a string hide of various lengths. In using the spear, they hold it nearly by the middle, and with the right eye cast along it, they dart it with great precision" /cited in

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English/. Bove's (e):158 description is more accurate.

the bone point and the shaft remain attached for a time, but it is much more disadvantageous for the wounded animal if it must drag along the loosened shaft which moves irregularly. With beating movements of the rope -- that is why it is attached to the shaft with cross-loops -- the man succeeds in detaching the shaft from the bone point that is stuck in the animal. Then he gives the animal as much rope as possible; after it has grown tired or lost a great deal of blood, he draws it toward him slowly and gently, at the same time easily rolling in the rope.

Fig. 36. Twin-barbed Harpoon Point. Two-thirds natural size.

It hardly seems possible that the man can to such an extent influence the direction taken by the escaping seal with the loose shaft which is directly beside the harpoon point sticking in the flesh. Even if one or the other of the cross-loops on the shaft should be loosened or shift, the shaft never stands at right angles, but at an acute angle to the direction of movement. This prevents it from breaking when the wounded animal violently strains forward.

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The hunter usually throws off this weapon as soon as he is on firm ground. If he uses it while he is in the canoe the greatest caution is required, especially when a whale has been wounded with it. After the animal has been hit with a lucky thrust, some men succeed in leaping on shore or on a rock while holding onto the end of the long leather rope or wrapping it around their body. Now they have a firm foothold and the canoe is out of danger. Sometimes the canoe can get close to the wounded animal and another person gives it the fatal stab. With the long leather rope of this harpoon several men may even pull a floating dead whale to shore.

/476 cont./

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411 Despite the fact that they are very similar, the large harpoon and the small harpoon are somewhat different. The virtue of both lies in their /477/ movable bone point (182). The longest that is

182. That is why Hyades (q):353 and (h):24 describes them as "movable harpoons" /translated from French/, and Dabbene (b):184, concurring, calls them "harpoons with a movable point" /translated from Spanish/.

ever made is placed on the small harpoon and then again on the large harpoon when a whale is attacked. With this the men strive to inflict a deep wound.

### 5. Javelin and Spear

Besides the missile weapons with movable points, the Yamana also uses those with a fixed point. The former I call harpoons; among the latter I distinguish the javelin from the spears. The javelin also consists of the octagonal shaft described above, sája, about three meters long, which is usually surmounted by the long bone point with one tooth, ɛ́owaja. Both are securely fastened. When the point is embedded in the animal's body, the shaft must not slide out, but must, by its weight, enlarge the wound and prevent the animal from escaping. The hunter uses this javelin primarily when attacking a seal that he has surprised on land or when he wishes to inflict severe wounds on an exhausted whale. This weapon is particularly suitable for that, since the shaft is heavy and the sharpened, long bone point penetrates deeply. Against smaller animals that carry a thinner layer of fat on their bodies, the two-barbed shorter bone point, wáixil, is also reliable, or even the long-toothed bone point, xúsuwaja. Although neither of them pierces deeply into the body because they are blunter than the ɛ́owaja, they cling sufficiently so that the dragging shaft tears open the wound and there is greater loss of blood. In other words, the javelin is most effective when the hunter is on firm ground and can put the entire strength of his arm into the thrust.

/480 cont./

411 shape and usually an almost rectangular tang (Fig. 39); the latter is inserted into the notch. Of decisive importance is the longitudinal measurement, for it is usually more than twice as much as a point on the arrow shaft. The former does not seem suitable for an arrowhead because of its size and weight. Since, moreover, it is fastened to a short stick, I regard the designation "dagger" as suitable for this weapon. It is also handled as such. A man grasps [225] the back third of the shaft and stabs toward a sea lion that he meets on land. He attacks it from the front, never from the side, and can get close enough to it without being bitten to thrust the dagger into its neck.

For the dagger points the natives formerly chose flat lamina of [177] black slate and greenish jasper; in modern times they prefer thick bottle-glass that is more easily worked. The edges of the glass

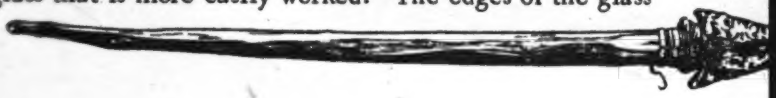

Fig. 38. The Dagger. One-third natural size.

dagger-points cut more sharply, but become dull more quickly. Continuous splintering under pressure with a short bone stick produces /481/ the form with the sharp edges and thick point. On my [126] second expedition, old Alfredo made me a dagger with a long glass point and with a total length of 48 centimeters (188). This

188. This piece is today preserved in the Museo Histórica at Santiago de Chile. See the observations made by Hyades (q):360 with the Indian named Yakaif.

enabled me to see how it was made and at the same time to learn in detail how it is actually manipulated.

From the dagger to the lance is only a short step. Sometimes it, too, has a large, heavy point in the form of a triangle. It must [172] come as a surprise that laurel-leaf forms of the /Fig. 39 appears here/ most frequent surface-finds on Isla Grande (Vol. I, 263) have to this day been found only very sporadically throughout the broad Cape Horn Archipelago. This lance is used in the same way and for the same

[Text continues on page 172.-Analyst]

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/513 cont./
According to Lovisato (b):129 the Yamana are "fishermen and only sometimes hunters along the coast" /translated from Italian/.

the resources she employs are the heritage of the acquired wisdom of many past generations.

Now we understand why the customary procedure in hunting and gathering is retained unchanged even by the few remaining Yamana. The ancient methods and manipulations automatically recommend themselves by their almost unsurpassable appropriateness. This is reason enough why the representatives of this tribe cling to their valuable heritage with unyielding tenacity. The basis of Yamana economic life -- primarily the occupation of hunting by the man, together with a considerable contribution from gathering by the woman -- was forced upon them, so to speak, by their environment. This particular type of food quest forces each individual family to a restless nomadic life.

22 In these fundamental respects the Yamana are similar to their northeastern neighbors, but they also enjoy noteworthy advantages besides. Whereas the northern Selk'nam are dependent on the cururo (Vol. I, 277) and the southern Selk'nam on the guanaco, the Yamana men have such a limited variety of animals to hunt in all parts of their country that they are never dependent on a single species. Fortunately, the Yamana woman, too, has a greater selection in her gathering than does her Selk'nam neighbor. The latter has only a few mushrooms and fish, while the former in addition has easy access to masses of the almost indispensable mussels and crabs. All this simplifies the food quest and improves the way of life of the Yamana not inconsiderably as compared to their neighbors.

/514/ 1. Seal Hunting

225 Without doubt seals provided the chief contribution to Yamana subsistence at all times and in all sections of the country. Formerly several species lived in herds on the many islands and rocks, places of wreckage, and coasts of the Cape Horn Archipelago. Even the giants of this species, the bear seal, tēpē'a (Arctocephalus

/514 cont./

225 australis), and the elephant seal, hásaxuwa (Macrorhinus leoninus), were among them. During the last decades only the small sea lions ama (Otaria jubata), and the maned seal, tjáta (Otaria byronia), remained in the vicinity of our Indians. Occasionally the larger bear seal (Arctocephalus australis) emerges again, but the other species stay far away. Along those coasts European seal hunters have long since exterminated these animals which were so valuable as food for the natives (231). Since then the number

231. In his day Hyades (r):295 reported on the elephant seal: "It is a species almost entirely destroyed" /translated from French/.

of natives has also noticeably decreased; hence the remaining specimens of the small Otaria jubata suffice to fill the food requirements and to provide the necessary variety in the diet. Seal hunting is the daily task, so to speak, of the man, but this is not to say that he actually engages in it every day. We properly give it first place here.

During the day individual animals like to lie on low flat stones and abandon themselves to sleep. The color of their bodies is an excellent protection for them, but the sharp eye of the Indian catches sight of them nevertheless. If possible, and if it seems advisable, he attacks the animal usually with a club or a heavy cudgel (232). He has plenty of practice in rowing up to the animal

232. Bridges (i)23 makes too fine a distinction and speaks of "three kinds of clubs, the largest of which called Yoj, pointed at one end. The second is called Wosin, and the third Kneea. This is the smallest and is also used as a missile" /cited in English/.

and creeping close to it. With a heavy blow he stuns the sleeping animal so that it can no longer escape. A few more blows of the club, carried out cautiously because of the animal's rage, kill it.

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225 If a man coming across a seal unexpectedly should not have a club, he ventures near with a medium-sized stone. He repeats these blows in quick succession until the animal falls over stunned (233).

233. Fitz-Roy (a):184 observed this manner of approaching smaller seals.

If there are several men together, they will even venture to approach a large herd lying on the beach. They take their places according to a definite plan and proceed in such a way that individual animals will separate themselves from the closed ranks of the herd. It is only these that they can approach closely enough to beat them with their clubs. On land the seals are awkward in their movements. If they are attacked, they raise themselves up in self-defense. They topple forward easily, whereas /515/ /Fig. 55 appears here/ sideways they can stretch far forward without losing their balance, thanks to the strength of their two pairs of flippers. The Indians know this, which is why they always attack a sea lion only from the front.

Seals are far more often pursued on the water. The hunter takes advantage of their confident and inquisitive natures (p. 38 /untranslated/). If he notices a playful seal frisking about on the water out of sheer pleasure and exuberance, he lures it toward him by whistling softly, by singing in a low voice, or by splashing rhythmically with his paddle. He continues this even if the animal disappears from the surface. At the same time he uses these few seconds to get nearer to it and lay out his harpoon in readiness. The seal will

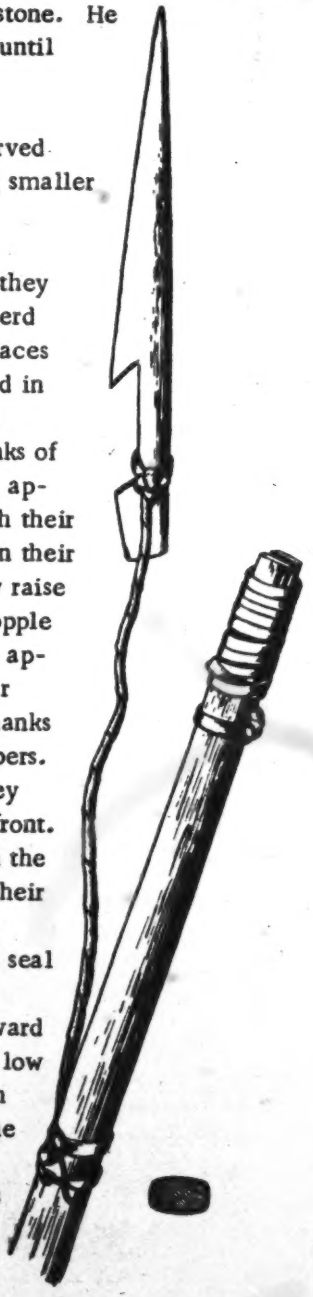

Fig. 55. Small Harpoon.

/515 cont./

225 perhaps dive down and up again several times. Meanwhile the occupants of the canoe remain motionless so as not to frighten it away. When it is close enough, the hunter, who has meantime stood up unobserved, thrusts the small harpoon vigorously into its body (Fig. 55). He makes sure that the weapon penetrates deep into the body. He has no time to aim at a certain spot, for he never knows in what position the seal will approach him as it emerges from the water.

He reached for the small harpoon because nearby he sees broad tangles of Macrocystis algae floating on the surface, whither the wounded seal will seek refuge. When the seal has the barbed bone point in its body, it will, in its pain, try to shake it off. It will try first with its teeth which usually do not reach. It hopes, therefore, to relieve its pain in the knotted tangle of algae stalks. In mortal terror it squeezes in there and worms its way through, meanwhile causing the bone point to detach itself from the notch of the shaft. Both /516/ pieces remain fastened together by a short strap. Since the shaft has become entangled in the tough snarl of algae, the seal is hampered in all further movement. The more it exerts itself, the greater pain it feels, since the sharp tooth of the bone point is embedded in its flesh and any tugging enlarges the wound. Loss of blood soon exhausts the seal. It and the harpoon shaft are confusedly intertwined in the knot of algae, and escape is impossible. Meanwhile the canoe has approached, and the hunter kills the seal with his javelin or club. Laboriously he detaches his booty from the tangle of algae and, full of satisfaction, lifts it into his vessel. Usually he also gets his harpoon back.

Sometimes he still has to undergo a serious battle with the seal which is incited by its wound in case the harppon has not penetrated deeply enough or no vital organ has been hit. At other times it will sink immediately if the wound was fatal. In that case the hunter loses not only his booty, but his weapon as well.

This is the method of hunting most frequently used, but every man must be prepared for the situation when the usual floating tangles of algae are missing at the spot where he has hurled his small harpoon against a seal. Now the functional construction of his weapon is equally helpful, for if the wounded seal should succeed in detaching the bone point from the shaft, it would not experience any relief thereby. While the seal swims away, the

/516 cont./

225 shaft of the harpoon will stand obliquely to the direction in which he moves, not only braking the seal's progress but also increasing the pain of the wound which is opened up more by the constant tugging of the shaft as it is dragged along. These two impediments are even effective, although less so, when point and shaft of the harpoon remain connected. The wounded animal becomes more exhausted the longer it struggles. The dragging harpoon shaft determines the direction in which it is escaping and prevents it from remaining long under water (234). The canoe of the hunter

234. Hyades (q):353 is right in saying that the detached shaft "thus becomes the buoy and guides the hunter who is able to pursue his prey and inflict new blows until it is killed" /translated from French/. Compare Dabbene (b):184.

can follow it quickly enough and will perhaps still overtake it in a tangle of algae where it tries to hide. He kills the wounded animal with a blow of his paddle or with a cudgel.

In open bays and in places where there are no accumulations of floating Macrocystis algae, where the hunter could hardly pursue the wounded seal, he uses the so-called large harpoon with the single-barbed bone point of medium length or the short twin-barbed point (Fig. 36) (235). If the animal has been well hit, the

235. Without justification Lothrop (b):152 speaks of "regional differences in the kind of point attached to the cypress shaft: in the east a single-barbed head was used; in the west a double-barbed form was employed" /cited in English/. As a matter of fact, both forms were used in the whole extent of the homeland of the Yamana.

bone /517/ point is secure in its flesh and the shaft becomes detached as a result of its agitated movements. This is the hunter's intention (p. 163). The farther away the seal gets in its escape,

/517 cont./

225 the more rope he gives it until the long lasso has run out. He holds fast to the end of the rope. The pulling power of the wounded seal now proves an advantage to the canoe, but on account of its agitated movements the greatest caution is required of the canoe occupants. Meanwhile the wounded animal has spent itself and constant loss of blood has weakened it until it is motionless. The encumbrance alone, which is attached to the harpoon point sticking in the flesh, forces the seal, which at first has thrown itself about wildly, to slow down its rapid escape and yield to the slow intake of the rope which the man immediately begins. The hunter and his booty finally come so close together that a blow with the paddle and a wound inflicted with the small harpoon or the javelin puts an end to the exhausted animal. If possible the hunter then concerns himself with the harpoon shaft which is sometimes floating about freely nearby.

The hunter prefers to use his large harpoon when he surprises sea lions in caves along the water. He lies in wait for his prey on the beach or from the vantage point of a stone sticking out of the water. From there he throws his dangerous weapon toward a seal that is swimming by and immediately lets the long rope unwind itself. Usually he has already tied the free end of the rope around his body (236). Since he is standing on firm ground, he can all

236. This less common method of hunting was also mentioned by Bridges (MM:XIII, 158; 1879).

the more safely pull in the wounded animal and kill it. No matter when the above-mentioned missiles are used in a seal hunt (237), they assure the hunter quick results with little effort.

237. Neither Hyades (g):24 and (q):353 nor Lothrop (b):152 mentioned the large harpoon which was no less frequently used on the seal hunt than the small harpoon. Bridges (MM:XIII, 158;1879), however, referred to it.

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2. Whale Hunting

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It sounds unbelievable that the short Yamana in their frail bark boats venture to approach the mighty giants of the ocean. Actually they do so, confident of their personal dexterity and the effectiveness of their large harpoon. In former times there were frequent opportunities to pursue a whale (238); for the last

238. A communication by Bridges (MM:IX, 14;1875) of May 2, 1874, shows how often they were provided with this lavish present: "The new visitors... brought much whale from Agia, where we hear three whales have lately been supplied to the people by a bountiful God, through the instrumentality of sword fish and whale beaters... Another whale is reported at Canagoosh" /cited in English/.

few decades a stray animal is seldom found in the Fuegian /518/ channels (239). Children and middle-aged persons whom I

239. Crawshay:XXVII exaggerated when he wrote as late as 1907: "Whales are plentiful in these waters, from those of the largest size known to some of the smallest" /cited in English/.

questioned about it had only occasionally experienced the stranding of a whale on their native shores (240). European whalers can be

240. As late as July 19, 1902, Williams (MM:XXXVI, 277;1907) reported from the mission station Tekenika: "A little time ago a whale was found on the beach in Cunna-ooosh" /cited in English/.

credited with the fact that these once numerous giants of the ocean have been almost completely exterminated in the Cape Horn region.

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225 The most common were Balaenoptera intermedia and Balaenoptera patagonica, the former exceeding all others in length and girth (p. 36 /untranslated/). The Yamana always had to expect to be disappointed when a čiyix (Ziphius) was stranded; its fat is not wholesome and has a laxative effect, which is something they well know from ancient experience.

225 476 We cannot speak of an actual chase when a dead whale is slowly washed to shore by the waves. If it is floating within reach, they try to pull it ashore. The dense flock of well-known sea birds announces this happy event to people far and wide, and they come rowing up from all sides. Unafraid, they venture forth far into the open sea and join forces to get the mammoth animal to the nearest beach. They take advantage of a favorable ocean current and line up in one direction. Every man plunges his large harpoon deep into the animal's body and lets the long rope uncoil (Fig. 35). As soon as it becomes taut, he must be very cautious in his canoe. Then every woman paddles her own canoe to the nearest coast while the men pull the whale after them with their rolled-up lassos. Loud shouts bring uniformity into their efforts. When about 20 canoes have assembled, and if the ocean current helps them along, this strange procession slowly approaches the nearest shore. Herewith success has actually been achieved, for neither a heavy sea nor storms can snatch this booty away from the lucky Indians. They keep the animal close to land on the long leather rope of their harpoons. They are even safer if they leap to shore and pull up the whale from there. They try to transfer the animal which is still floating in the water to a flat slope of this beach. They keep it parallel to the coast, and the long lassos of their large harpoons remain taut. If the bone point should become detached, it is once more thrust into the dead body of the animal, and this time deeper. Depending on the force of the current, many men must make sure that the mighty prize is brought quite near to the coast, and they must sometimes continue their vigil during the night, for the restless sea would surely drive it elsewhere or far out again. They wait for a breaker or high tide to deposit the whale with a powerful push onto the beach. Days can go by before this happens. Meanwhile a few people set about cutting large scraps of fat out of the carcass, which they /519/ bring to shore in their boats. Sooner or later the current will deposit it on firm ground. Now they can enjoy their rich booty.

/519 cont./

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They are still more fortunate if a tidal wave alone tosses a whale ashore, for then their table is richly laid without effort on their part. No matter where this highly desired gift of Mother Nature falls, it relieves many families for a time from the urgent, day-by-day cares of subsistence.

For a genuine attack people gather around a sick or completely exhausted whale. It is easily recognized, for it floats almost motionless on the surface. This attracts large quantities of great sea birds that circle around it. If after long pauses it moves only a little, several canoes approach and the man hurl their large harpoons against it. They aim to inflict many severe wounds upon the animal in the shortest time, hence they hurl all the weapons they have. The whale looks very strange with javelins, spears, and harpoons, especially since it is still moving somewhat. Hour after hour the men keep at it, plunge their weapons into the body of the weary animal with their utmost strength, pull them out again if their supply of harpoons and spears is exhausted, and do not tire of this violent exertion until they are assured of their booty (241).

241. Bridges (MM:IX, 12;1875), very much amazed, describes such a chase: "This evening some ten or more canoes came, each having a share of the poor whale, which literally was killed by inches, having received into its body somewhere about a hundred spears, and from first to last was being followed and wounded from Friday, four p.m., till ten p.m. (Saturday, 25th April, 1874)" /cited in English/.

Not infrequently a whale, unpleasantly aroused by the many wounds and painful attacks, escapes. The men tug hard on the lasso after they have plunged the large harpoon in deep, in order to enlarge the wound and make it bleed more. The excited animal not infrequently capsizes several canoes by strong movements of its body or by powerful blows with its tail. The endangered occupants sometimes meet their deaths in the waves.

/519 cont./

225 If the many men succeed in actually killing the whale, they haul it ashore. They build their huts beside it and feast on the rich booty. Sometimes, however, the sick whale does not stay in the same place, but swims farther away. Most families try to follow it. [462] While the women steer the light vessel, the men thrust their large harpoons deep into its body and let out the long lassos, the ends of which they grasp securely with both hands. The whale then pulls the canoe after it. Now a very daring ride begins! If the whale dives down to considerable depths or accelerates his flight, every man must release the rope at the dangerous moment. He loses his weapon, but at least saves his own life and that of his family. Perhaps the hunted animal will reappear again within available distance; then the men /520/ attack it with renewed courage. As long as a chance of success beckons, they are after it, exposing themselves to utmost mortal danger, for to be deprived of this great booty means considerable loss to them, to say nothing of the many weapons they have sacrificed in vain.

Their hunting prospects are somewhat more favorable when they are pursuing a whale being chased by a grampus, špájaci (Orca magellanica). In this case their boldness is far more dangerous. It is well known that the above-mentioned animal makes a habit of attacking younger, smaller whales. With his powerful back fin, he strikes and jabs against the whale which can only seek refuge in flight. It makes for narrow channels and shallow bays. Its pursuer hastens after it and even wounds it badly. The whale tries to help himself by frequent leaps out of the water (p. 37 /untranslated/). The Indians are very familiar with this (242).

242. Dabbene (a):36 writes about this in detail.

The špájaci is accompanied not only by a few of its own species, but even more by smaller related animals; he is regarded as the "master" whom the others of his "people" hasten after. When the whale realizes he is being cornered, he approaches the coast in his despair. Now the many followers become plainly visible; before that they had often surfaced. The badly wounded whale

/520 cont./

225 sometimes finds a last refuge on the shallow shore of a quiet bay, to which he glides and where his importunate pursuers finally desist.

A conspicuous battle among the large sea animals does not escape the sharp observation of our Yamana, and they determinedly hasten after them in their canoes. They know that the pursued whale will prefer to seek refuge in a shallow inlet. Quickly they plunge their large harpoons into its body and tug on the coiled rope of leather so that the wounds grow larger. If many men are together, the whale receives one harpoon blow after another without pause, and the considerable loss of blood makes him mortally weary. Chased by dolphins and Indians, he dies in a sheltered inlet, usually lying on the shallow beach. Immediately they pounce on the booty. Perhaps they must lament the loss of one or more canoes that fell victim to the rage of the mortally weary whale.

Obviously it is very dangerous to approach a whale in a weak bark boat, but courageous men decide to do it when they can tell by various signs that the animal is sick or has been badly wounded by dolphins (243). No one dares approach a healthy adult animal,

243. The too brief account of Hyades (h):23 gives only an incomplete picture of this type of dangerous undertaking in which many men take part.

for they could not kill it with their ineffective harpoons. The fact that the Indians accomplish anything with these weapons is the result of their uninterrupted efforts. Again and again they must thrust their harpoons and spears deep into the exhausted animal, /521/ until it bleeds from many jabs. It is pursued for days, until it finally succumbs to its countless wounds. The daring of these small human beings is amazing. As Bove (e):158 and Lovisato (b):136 acknowledge, they set out with only the harpoon, "with such a simple weapon, to attack the whale, but often enough canoe, harpooner, and paddler are tossed into the air by a blow from the tail of the aroused animal." They think of the abundance of fat and meat as well as the other important things that a single

/521 cont./

225 whale, be it large or small, will provide for many families, often entirely free.

### 3. Bird Hunting

223 225 The home of the Yamana swarms with land birds and sea birds. A gaily colored, feathered throng of many shapes animates the islands and rocks, inhabits the inlets and lagoons, and crosses the network of channels and the broad open spaces in flocks, in stormy and sunny weather. Their habits and characteristics are all well known to the Indian, but he pays them special heed only insofar as they have something to offer him or to tell him. Some of them furnish him with tasty meat and others with fresh eggs in spring; some yield him coveted feathers for body decoration, others their bones for necklaces; certain ones announce a change of weather or of seasons, and a few are heralds of interesting events in the distance, even in the future. All of them live in his belief [773] as the descendants of that stratum of population which inhabited this region long before the actual human beings of today.

As is to be expected, however, those species mean most to him which serve him as food. Not just any animal that comes within the Indian's range tempts his palate and his appetite. He has good judgment in distinguishing among them, and he consciously chooses what is good for him. He avails himself of only a few species for his own use from the plentiful feathered world of his homeland. What does not serve him and does not suit his wishes, he lightheartedly passes by. Everywhere he is selective and wisely calculating, not least in evaluating the types of birds available to him.

223 From the start he pays no attention to small animals; the meat they could give him would not be worth his efforts. Herons and owls mean nothing to him either, for they are all skin and bones. Sea birds and the easily available gull chasers, especially the diurnal predatory birds, such as condor and falcon, vulture and hawk, repulse him because they feed on carrion. There are other birds, however, that he would not want to be without in his selection of food; they are a welcome change in the dull taste of his monotonous meat diet. Primarily he has his eye on penguins and

1: Gauticle--369 E-6 (1919-1926) 1937 0086 Telgan 0086

/376 cont./
days of need are over, they recover /376/ surprisingly fast. Serious after-effects or a weakening of their health scarcely ever appear. Habit has taught them how best to overcome the brief periods of hunger without harm.

Ever since the Tetteto have had easy access to the various farms, they have borrowed there for all kinds of European food and luxuries, such as sugar and wine, coffee and tea, onions, canned tomatoes, and other things. They also acquired cooking pots, in which they prepare our foods so that they are reasonably tasty. This strange diet, however, is not good for their health. Besides toothache, other physical ailments appear, which the people in olden times were fortunately spared despite all kinds of deprivations.

### 2. How They Divide the Booty

We must insert here a few data about the way in which larger pieces of game are used. On the one hand we shall mention obligations of a social nature, for which we shall later give more detailed reasons. On the other hand, the receipt of a gift cannot be compared with ordinary food-getting. Since, however, in the case of the most important animals hunted, namely, seals and whales, there is a definite obligation to let others share in, we shall most conveniently describe here the prevailing custom.

Every local group greets with indescribable rejoicing a whale that has been driven inland or deposited on the beach. Dense swarms of sea birds announce this extraordinary gift of nature. According to the general conception, any man who has first seen or touched the whale is the owner of it, not, however, in the sense that he alone may eat of this animal, the enormous masses of which he would, in any case, be incapable of coping with, but only insofar as it is up to him to arrange an orderly distribution (347).

347. From an earlier period when whales were still plentiful Bridges (a) 208 reported. "Certain persons, those who first found the whale, have the right to distribute it" /cited in English/.

/1936 cont./

•225 the one claimon for priority right since, in view of the gigantic size of the animal, everyone can abundantly satisfy his wishes. In general, the old, influential men reach an agreement with the one who first sighted or touched the whale as to which of them should undertake the direction. Not everyone has the experience and skill to do this, but these are demanded in order that the distribution can proceed without a hitch and as little as possible of the meat and fat is lost. A so-called ulisagvik, a man who is practiced in cutting up a whale (348), chooses four or five helpers with

348. BD-E30 describes him as "clever, expert, careful in cutting up a whale" /cited in English/.

whom he attacks the giant animal.

They make a quick estimate to determine the number of people present. Then they immediately step up to the whale or on top of it, and with /ETT/ sharp round shells they cut off one piece of fat after another, the size of a small table-top. Each distributor begins at a certain spot on the carcass and first of all scrapes off the parasites from the surface, especially the common balaenae pennatae. Then he strips off the thin skin and makes incisions from above deep enough to strike the muscle tissue. Finally he separates the square flap of fat from below and lets it go to the first applicant. One small area close to another is taken off the whole carcass by the distributor. Before he gives away an individual piece, he makes a long incision in the middle of the large flap of fat, through which the recipient sticks his head. It hangs around his neck like a shoulder-cape and he goes off with it happily in the direction of his hut. It could not be so conveniently carried either on his back or in his arms. A common sledge off sht, besides, he has his hands free. Without discrimination, one after another of the persons assembled gets his piece and returns when he has consumed it.

Naturally, one or another of them can state his preference to the distributor, he certain ones are twice then others. Even on the trip to the spot where the whale is stranded people talk about the abundance that has now been offered them and express their preference for this or that morsel. One person, for instance,

/377 cont./

225 will bother after a piece of breast, another for a piece from the neck, that one prefers the head or the tail fin, some like other parts better. This conversation arises from unrestrained exuberance, and everybody's joy over the rich gift finds expression in such spontaneous wishes. In reality, however, so many special demands could not be considered, nor is the distributor bound to comply with them. In spite of all the previous talk, everyone is customary to take any piece that is given him, no matter whether he previously expressed himself in favor of some other one. A sense of honor and the pressure of self-discipline forbid loud demands for preferred parts or expressions of discontent over the piece offered. Since I am not in a position to check personally, I must trust the statements of the Indians that some layers of fat are tenier than others. In general, the entire belly covering is regarded as the best piece.

225 225 192 There are special names for the larger individual body areas of all species of whales. The lips are called ɨ́fɨ́we. The adjacent lower part between the lower jaw bones is ɨ́fɨ́ɨ́je, the upper part adjacent to the cranial head area is ɨ́fɨ́o. To the right and left of this are the two cheeks, ɨ́fɨ́ɨ́ka. Next to the jaw region and lower neck, ɨ́fɨ́ɨ́ɨ́ɨ́, is ɨ́fɨ́mɨ́ɨ́, the generally furrowed breast and belly area. The areas below the cheeks are very rich in fat and are called ɨ́fɨ́ɨ́ɨ́ɨ́. On the back, ɨ́fɨ́ɨ́ leads into ɨ́ɨ́ɨ́ɨ́ɨ́, the anterior middle back which /378/ leads into ɨ́ɨ́ɨ́ɨ́, or ɨ́ɨ́ɨ́ɨ́ɨ́. On either side of this are the ɨ́ɨ́ɨ́ areas. Between these and the ɨ́fɨ́mɨ́ɨ́ region are the ɨ́fɨ́ɨ́ɨ́ ɨ́fɨ́mɨ́ɨ́, the actual sides of the whale above the ventrigal dorsal fins. In front of these, toward the cheeks, are ɨ́ɨ́ɨ́ɨ́ and ɨ́ɨ́ɨ́. The entire rear tapering part is called ɨ́ɨ́ɨ́ɨ́ and leads into the wide tail fin, ɨ́ɨ́ɨ́ɨ́. The pair of front side fins is called ɨ́fɨ́ɨ́ɨ́. These areas are named with reference to the layer of fat because the fat is first removed from every stranded whale. An exception is made in the case of the finback, ɨ́ɨ́ɨ́ɨ́ ɨ́ɨ́ɨ́ɨ́ (spec.?), the fat of which has a very laxative effect. When afterwards they want to refer to the meat exposed directly under the layer of fat, they choose, in part, names having the additional word ɨ́ɨ́ɨ́ɨ́ (meat). Thus ɨ́ɨ́ɨ́ɨ́ ɨ́ɨ́ɨ́ɨ́ is the meat in the abdominal covering. Moreover, there is a special designation for the meat of the entire upper and lower rump, namely, ɨ́ɨ́ɨ́ɨ́ɨ́ɨ́. The

/578 cont./

225 parts on the upper jaw extending far back are called yáuaxē; 225 the tongue, lēuki; and the entrails, hésuwa. For the meat close 192 between and on the bones, they use the special designation hita (349).

349. BD:260 gives a different meaning: "Old and much wasted blubber as found on shores after being long in the sea" /cited in English/.

and for the fatty tissue in the body cavities, apēla. The great importance of a stranded whale for an entire group of people explains why there are special designations for the individual areas and parts of the body. Even the place where the whale has been tossed up has the special name ufkáriteka. The word tuufkáritekána, which BD:451 translates "to send (as God does) supplies of whale meat" /cited in English/, comes from the same root.

225 It is easy to see the reason for the distribution by different men. It is nothing more nor less than the best possible utilization of the entire huge animal. They do not want any part to be lost or soiled and trampled. Such devastation would be unavoidable if everybody could step up to the whale unhindered and ruthlessly cut out certain parts for himself. In an orderly distribution the special wishes of those present are considered as much as possible, everyone receives an abundance, and the entire supply is utilized. Hence everybody adheres strictly to the established custom and lets the respective distributors attend to their duty. In spite of 225 this, selfishness sometimes prevails, and a group will try to con- 578 ceal the stranding of a whale from others or, if the latter should come near, deny them access to the dead sea monster. Immediately a fight begins and the weaker side must give up the booty to the others (350). Such events /579/ are rare because a floating

350. Bridges (a):208 leaves no doubt about serious encounters over a stranded whale: "As long as a party can safely keep a whale to themselves they take care not to spread the news...But great fights sometimes happen through the selfishness of a party. For

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the news must spread abroad, and then a rush of people happens, they are disappointed by coming too late, and should those who hoarded up the blubber not part it out, there is a fight, canoes are broken, and this brings on a general engagement" /cited in English/. As we have said, however, these are rare occurrences.

dead whale is announced over a wide area, and many people hasten there, even from afar. In comparison with these, the ones that first take possession of it are always in the minority.

225 It hardly seems possible, but in the end even a whale is not an inexhaustible source of fat and meat. If 20 families -- usually, however, the number is doubled and quadrupled -- descend on this sea monster, eating excessively and storing large masses of [251] fat in the swamp, the supply diminishes perceptibly. Sometimes many people will leave after about a week, tired of the monotonous diet, and will make room for others. The new arrivals pounce on the rest ravenously, and it diminishes all the more quickly the more numerous they are. A whale has probably never lasted for more than a month, even if it was one of the largest species, such as hašuwápisa (Balaenoptera intermedia), and was an extraordinarily large specimen, kupatmérana. Sooner or later the skeleton lay there pretty much cleaned of meat and fat, left to the further cleansing of rain and waves.

Lewis, from his own experience, reported on October 9, 1871, about a seemingly mortally weary small whale (351) which was

351. "It was a whale, very young, about 17 feet in length" /cited in English/.

effortlessly killed near the coast on September 13th. "The process of dissection was carried on with such zest, that by eleven A.M. the same day not a vestige of flesh or bone remained on the spot, save the liver, not eaten as a rule by the natives. Our poor fellows jumped into the almost freezing water nearly up to their armpits, and applied themselves as I had never previously seen them do;

/579 cont./

225 a fire was soon made on the spot, some strips of blubber frizzled thereon, and eaten with a gusto. Canoes from all directions soon made their appearance, and a sorry time of it had our poor fellows, for whilst a bit of whale remained to be obtained by coaxing, importunity, or bullying, not a woman would stur /sic/ to get a mussel. The little wood adjacent became the midnight resort of wandering spirits, who turned up [in] all suspicious-looking places in the little stream, often alighting upon some cautiously concealed blubber, much to the loss and sorrow of the owners who had deposited it there for safety, and preservation from corruption" /cited in English/ (MM:IV, 34;1872). This shows the bustling general activity of the people gathered round the sea monster, for it furnishes the raw material for many useful things.

Until the most recent times a stranded whale was a great attraction for all the natives. On July 19, 1902, Williams (MM: XXVI, 277) wrote: "A little time ago a whale was found on the beach in Cunna-voosh, and as soon as the news reached Tekenika about thirty left for /580/ a feast. Most of them returned in seven or eight days" /cited in English/. Since then it has not become known that a dead or sick whale was stranded in the area inhabited by the Yamana. This has been a real loss which they bitterly lament.

225 431 577 Quite different from all this is the procedure of a man who occasionally dissects and distributes a large seal. Anyone who has been favored with success in the hunt takes the booty intact to his hut. Here he immediately skins it (p. 68). If it is a particularly large animal, perhaps a bear seal, tẽpẽ'a (Arctocephalus australis), or an elephant seal, hášaxuwa (Macrorhinus leoninus), he usually summons two other men and says: "Here is the seal, divide it among us all!" With these words he hands over, as it were, to the community of all the families who happen to be there the fresh carcass of the animal and relinquishes his personal right of disposal. These men cut up the booty into several large pieces, according to the number of huts, and send them off. The hunter is scarcely favored, but nevertheless he shows himself satisfied with what he gets, just like any of the others. Social considerations for the group as a whole have created this habit which we shall discuss later in this book.

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225 431 577

Although it involves only a moral obligation, no one can actually avoid it in the long run. It also applies to less important things. For example, in the case of a small sea lion, either ámа (Otaria jubata) or lēfkeámа (Otaria falklandica), the successful hunter drags it in front of his own hut and cuts it up himself into several pieces. Now it is the duty of the woman to share it with other families. She counts the women who live next to her and brings each one a good piece of meat, even if she should have no more left over for her own family than what she gave each of the others. Sometimes she goes empty-handed when there are many who expect a gift from her. To give away inferior parts or to keep conspicuous amounts for herself would arouse a harsh suspicion of selfishness. It seems that in former times every hunter would bring a guanaco whole back to his hut and only then dissect it. His wife took over the task of distributing the individual pieces (352).

352. Only Aspinall:270 reports: "Anyone fortunate enough to kill a guanaco must give certain parts to relatives and friends, and this is always done very willingly." It would be more accurate to say that the neighbors, whoever they happen to be, are, without discrimination, presented with a decent piece of meat.

This duty to let others share in one's own success also applies to the things that the women and girls have gathered. If they bring home fungi and berries, mussels and snails, crabs and fish in their little baskets, they immediately make gifts to all the women. A person who gets sea birds or birds' eggs divides them equally. Thus, no one keeps for himself everything he has hunted or gathered, and everyone strives to fulfill this universally applicable duty. The pieces to be distributed are given to the neighboring families according to certain rules which we shall discuss later.

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as Hyades (g):38 correctly judges, "work that is not too hard, since the canoes, made exclusively out of the bark of the birch-leaved beech, are marvelously light."

This work is a great strain on the entire upper part of the body, for the legs are neither braced nor do they offer support, and the arms do not rest on the rim of the canoe, yet bear the entire strain of free paddling (418). In the vessel all the occupants must squat

[142]

418. Hence the slight development of the legs in contrast to the sturdy torso of the healthy, active women (p. 219 /untranslated/).

close together deep in the bottom, with their legs tucked under. Its center of gravity is very high, even when it is loaded to capacity, and it would easily tip over if the balance were disturbed. Children are told that they should bend their heads and the upper part of their bodies low; usually they lift themselves only high enough for their eyes to reach the level of the gunwale (419).

419. The words of Lovisato (b):134 are to a certain extent correct: "In this canoe the Fuegians remain in such a position that only their heads may be seen, a position identical with the one they maintain in the wigwam" /translated from Italian/.

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Before the family leaves the shore, man and wife have agreed on the goal of the journey or the course. She now steers toward this while he constantly is on the lookout for game. If an animal comes into view, he tells his wife and reaches for his spear or harpoon (420). As the vessel nears the animal, he slowly stands

420. The division of labor within the family is thus clearly expressed. Aspinall:270 refers to this: "Each canoe holds one family; the

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women row and the man is on the look-out with raised javelin."

up and, at the appropriate moment, throws his weapon. Only the perfectly synchronized co-operation of both of them assures the success of the hunt, and every married couple achieves absolute perfection in this in the course of the years. When they pursue a wounded animal, the woman must occasionally exercise extraordinary strength. She is equipped for it by the habit of almost daily paddling.

502 If the family has been rewarded with unexpected luck in the hunt or if they are very tired from the pursuit of an animal, they sometimes suddenly decide to land at the nearest good place. The most suitable site is a flat, gently sloping beach, covered with coarse pebbles, in a calm inlet. The woman does not let the canoe run aground, since all friction is to be avoided. She holds the bow steady at right angles to the shore while the inmates disembark one after the other (421) and /616/ toss all the implements

[158]

421. Only exceptionally, in case the man is ill and cannot walk, does Aspinall's:270 assertion hold: "In leaving the canoe, the woman must first carry the man ashore. He carefully holds the firebrand, protected between sticks of wood, above water, and begins first of all to erect a primitive hut." As a rule, however, the landing proceeds as described above and, for example, as is described in La Nature:274.

along with all the provisions onto the shore. One of the children carries a glowing stick of wood to the place that the father has pointed out to the child as the chosen campsite. The girls usually do this. The adults make sure that the last sparks of the fire in the canoe have been extinguished. Meanwhile the Indian woman remains seated in her canoe and keeps it on the same spot by paddling. When everything has been unloaded, she still has to moor it. If the landing place is suitable, a layer of Macrocystis

423 /966 cont./
635 children while his relatives live far away.

Finally, there is a completely different kind of occasion
● 225 when all boundaries are ignored, namely, when a whale is stranded.
423 A certain priority is conceded to those in whose home district this
425 mighty animal is deposited on the shore, for sometimes they have
635 worked hard before the rich booty is spread out before them (p. 224). Nevertheless, their priority consists chiefly of the privilege to determine the so-called distributors of the fat and meat. It is not left to the discretion of the individual to go up to the animal and cut out a piece here or there for himself. Rather, it is the task of a few men to cut up the big animal properly and to give something to each one present if he wishes it (p. 310). This is the only way to prevent useless waste.

Anyone within the widest radius who learns of the stranding of a whale may head toward the spot unmolested and remain until all the suitable parts are consumed or distributed. The people native to the region arrive ahead of the visitors from a distance; nothing prevents them from taking the prized whalebone and from having the tastiest pieces cut out for themselves. Hence the people within the bounded area where the mighty animal was washed ashore do enjoy certain advantages. It is easy to see why other tribal members are also allowed to share this rich gift of Mother Nature, according to common law. A small number of people would be unable to consume the considerable amount of fat and meat quickly enough in the short time before it spoils. Therefore, nothing would be more natural than to apply, without restraint, the common principle of sharing with others, especially when there is abundance to be had without effort. Alerted by dense flocks of sea birds, the Indians come pouring in to the stranded whale, even from some distance, and they all enjoy the excellent taste of the blubber. No one would dare rebuff a visiting stranger nor hinder him; if one were to do so, he would be loudly decried as a selfish human being.

423 As for material goods that are common property, our Yamana have only the two Great Huts built for the čiéxaus and the kína, the men's ceremony. Both serve in the fulfillment of a task for which the group as such is obligated, and the adult participants busy themselves at it quite as a matter of course. From the start

2: Cooper E-4 (no date) 1946 SH6 Yahgan SH6



262 Lothrop (1928, p. 32) rated the relative importance in the *Yahgan* dietary of their foods as follows: (1) Easily of first importance, mussels; (2) next, seals, and fish of many kinds; (3) next, porpoises, gulls, and bird eggs; (4) then, whales, limpets, crabs, sea urchins, geese, penguins, cormorants; (5) last and least, otter (chiefly in the west), guanaco (only in the east), conchs, ducks, berries (especially wild black currants). The fungi eaten were those growing on trees; those growing on the ground were not eaten. Some wild celery and wild parsnips and two varieties of cress and young shoots of tussock grass were also eaten. Foxes were eaten only in famine as a last [263] resort. Salt was not used.

225 **Hunting.**—Seals were hunted with spear or harpoon from canoes or from land (pl. 36), or killed with clubs. Whales were occasionally hunted in the open sea with spear or harpoon; stranded or dead whales were eagerly exploited. Dogs helped in otter and fox hunting. 223 Cormorants were taken at night by torchlight with clubs; also with a pronged wooden gorge hook. Birds were taken with pole snares (fig. 11, *d*) and with single or multiple tether snares of sinew or whalebone. No lifting pole snares, deadfalls, or pitfalls are reported.

226 **Fishing and sea-food gathering.**—Mussels were gathered by hand; limpets, with a flat-ended stick; sea urchins, with a four-pronged wooden fork; crabs and other Crustacea, with a harpoon or a three-pronged stick. For taking sea food, the *Yahgan* also used a spear with two diverging shanks, or two to four spears lashed together. Women fished with a kelp-stem or braided whale-sinew line, that had a slipknot of whalebone or of quill at the end, instead of a hook, to hold the bait; slowly drawing the fish to the surface, they would grab it by hand. Fishhooks were probably lacking. Weirs of branches or stakes were used. True fish nets were absent. The nearest approach thereto was a small basket attached to the end of a pole and used as a sort of dip net for diminutive fish.

251 **Food storage.**—Limited quantities of dried tree fungi were stored; so too was oil, especially whale and seal oil.

415 **Food preparation and eating.**—Large mussel shells were used for [252] melting fat and holding grease. Water was heated and grease melted by throwing hot stones into them, but there is no record of stone boiling proper.

Shells of large mussels were sometimes used as plates; shells or bark buckets as cups; hollow bird bones or reeds as drinking tubes.

### CAMPS AND SHELTERS

361 There were no permanent villages. Certain groups of natives re-
621 lated apparently by blood and marriage frequented and occupied more or less fixed separate localities within the respective five sub-

3: Lothrop E-5 (1924-1925) 1928
SH6 Yahgan SH6



On Gable island and other places where birds nested the Yahgan captured the young and tamed them to frequent their wigwams until they were large enough to be eaten. The writer has seen young upland geese and gulls thus tamed. Also, in the summer, the Yahgan had special bird hunts near the breeding places, because at this time of year the birds, though nearly full-grown, have not learned to fly and may be captured by running them down.

223 [231]

### FISH-LINE

The Yahgan fish-line, shown in fig. 88, consists of three elements: line (*tápim*), sinker (*társhir*), and bait noose (*tukaléna*). The line is of braided whale-sinew and is ten to twelve feet long. The sinker is a small stone with notches knocked in opposite sides. The noose, like the bird nooses, is a narrow strip of whalebone scraped thin and flexible with a bit of shell. In an emergency a piece of kelp was used as a fish-line.

227

FIG. 88.—Yahgan fish-line. Length of coiled line, 6 in. (14/2375)

In order to fish, the Yahgan women paddled in their canoes to a shallow reef. There they anchored the canoe by inserting the handle of the paddle under a gunwale so that the blade projected outboard on the other side. A heavy piece of kelp was hauled across this, which not only served to prevent the canoe from drifting but also steadied it. Bait was then inserted in the noose and the line was lowered. When a fish had nibbled at and partly swallowed the bait it was pulled to the surface, seized by a quick dart of the hand, and killed by biting it in the head. Fish were cleaned as soon as they were caught by biting a hole in the belly through which the guts could be extracted with the finger.

225